What is claimed is:

1. A thin film magnetic head including a magnetoresistive effective type thin film magnetic head element comprising:

a first and a second magnetic shielding films which are made of magnetic material,

a first and a second shielding gap films which are made of non-magnetic insulating material and located between said first and said second magnetic shielding films,

a magnetoresistive effective element film which is located between said first and said second shielding gap films,

a first and a second longitudinal bias-applying films which are located in both sides of said magnetoresistive effective element film, and

a first and a second electrode films which are located so as to cover edge portions of said magnetoresistive effective element film beyond said first and said second longitudinal bias-applying films, wherein

the difference in surface level between said magnetoresistive effective element film and said first and second longitudinal bias-applying films is set within ± 20 nm.

2. A thin film magnetic head as defined in claim 1, having a track width of 0.2 μm or below which is defined by the distance between said first and said second electrode films.

3. A thin film magnetic head as defined in claim 1, further including an inductive type thin film magnetic head element on or under said magnetoresistive effective type thin film magnetic head element, to constitute a combination type thin film magnetic head.

4. A thin film magnetic head as defined in claim 1, wherein said first shielding gap film has depressed portions on the top surface thereof, and said first and said second longitudinal bias-applying films are formed on said depressed portions of said first shielding gap film.

5. A method for fabricating a thin film magnetic head including a magnetoresistive effective type thin film magnetic head element comprising a first and a second magnetic shielding films which are made of magnetic material, a first and a second shielding gap films which are made of non-magnetic material

and located between said first and said second magnetic shielding films, a magnetoresistive effective element film which is located between said first and said second shielding gap films, a first and a second longitudinal bias-applying films which are located in both sides of said magnetoresistive effective element film, and a first and a second electrode films which are located so as to cover edge portions of said magnetoresistive effective element film beyond said first and said second longitudinal bias-applying films, comprising the steps of:

forming said first shielding film on a given substrate,

forming said first shielding gap film on said first shielding film,

forming a magnetoresistive effective film on said first shielding gap film,

partially etching and removing said magnetoresistive effective film via a first mask fabricated thereon to pattern and form said magnetoresistive effective element film,

forming said first and said second longitudinal bias-applying films via said first mask at both sides of said magnetoresistive effective element film so that the difference in surface level between said magnetoresistive effective element film and said first and said second longitudinal bias-applying films is set within ±20 nm,

forming said first and said second electrode films so as to cover edge portions of said magnetoresistive effective element film and said first and said second longitudinal bias-applying films,

forming said second shielding gas film so as to cover said magnetoresistive effective element film, said first and said second electrode films, and

forming said second shielding film on said second shielding gap film.

6. A fabricating method as defined in claim 5, wherein the forming step of said first and said second longitudinal bias-applying films includes the steps of forming underfilms, forming hard magnetic films on said underfilms and forming protective films on said hard magnetic films, and by controlling the thicknesses of said underfilms and/or said protective films, the difference in surface level between said magnetoresistive effective element film and said first and said second longitudinal bias-applying films is set within ±20 nm.

7. A fabricating method as defined in claim 5, further comprising the step of partially etching and removing said first shielding gas film in the thickness direction, wherein by controlling the etching depth in the thickness

direction of said first shielding gap film, the difference in surface level between said magnetoresistive effective element film and said first and said second longitudinal bias-applying films is set within ±20 nm.

8. A fabricating method as defined in claim 1, wherein said first and said second longitudinal bias-applying films and said first and said second electrode films are formed by means of sputtering.

9. A fabricating method as defined in claim 1, wherein the track width of said thin film magnetic head, which is defined by the distance between said first and said second electrode films, is set to 0.2 μm or below.